

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 57 and 59 have been amended. Claims 1, 8-14, 31-32 and 38-59 are pending and under consideration. Claims 45-54 are allowed. Claims 8-9 and 31-32 are objected to.

OBJECTION TO THE DRAWINGS / REJECTIONS UNDER 35 U.S.C. §112 (CLAIMS 55-56):

The drawings are objected to, and claims 55-56 are rejected under 35 U.S.C. §112. The Examiner's position in the objection/rejection is that features of claims 55 and 56 (including the fluid swirl formation object disposed at a center of the body) are not disclosed in the Specification or shown in the drawings.

Applicants respectfully disagree with the Examiner. FIGS. 9A and 9B and page 12 of the present Specification disclose the features of claims 55 and 56. Specifically, the claimed concave space corresponds to concave part 33. The fluid swirl formation object corresponds to fluid swirl object 32, which is at a center of equipment 31.

REJECTIONS UNDER 35 U.S.C. §103:

Claim 57 is rejected under 35 U.S.C. §103(a) as being unpatentable over Siniaguine et al. (U.S. Patent 6,099,056) in view of Siniaguine et al (U.S. Patent 6,402,843).

Independent claim 57 recites the base is surrounded with a two-stepped-shape-peripheral edge. However, the retaining elements 13 of Siniaguine et al. '056 (relied upon by the Examiner) do not form two steps.

Claim 58 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Siniaguine et al. (U.S. Patent 6,402,843) in view of Akashi (U.S. Patent 5,067,762).

The Examiner admits that Siniaguine '843 does not teach the claimed fluid discharge passage, but instead relies upon the pipe 12 of Akashi (FIG. 13). However, the Examiner's combination is not proper.

Siniaguine '843 relies upon the creation of a vortex in the chamber 4. A low pressure region in the center of the vortex creates a partial vacuum which holds the wafer. The amount of attraction of the wafer is delicate, since too large of an attraction will risk distortion of the wafer, and too little attraction will lead to inadequate adhesion. Siniaguine '843, col. 7, ln. 5-23. The introduction of the exhaust pipe 12 of Akashi would affect the formation of the vortex and the pressure distribution therefrom. However, there is no teaching in the references as to how to control this new pressure distribution so that the proper attraction is maintained. Thus, the Examiner's combination would not work properly.

Claims 1, 10, 14, 38, 39, 40, 41, 42, 43 and 44 are rejected under 35 U.S.C. §103(a) as being unpatentable over Siniaguine et al. (U.S. Patent 6,402,843) in view of Trayes (U.S. Patent 4,009,785).

The Examiner relies upon the newly cited reference to Trayes as teaching the claimed centering guide and a centering mechanism to adjust the centering guide to cause the centering guide to control a lateral movement of the object. Specifically, the Examiner relies upon the pins 70 which extend from pickup surface 68 to prevent movement of the wafer 10 on the pickup surface 68 after pick up. The pins 70 are joined to a ring-shaped collar 72. Trayes, col. 4, ln. 8-15 and FIG. 2. The pins 70 do not "adjust" any other elements. Instead, the pins 70 maintain position after the pickup. Thus, the pins 70 do not adjust the centering guide, as claimed.

Claims 11, 12 and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Siniaguine et al. (U.S. Patent 6,402,843) in view of Trayes (U.S. Patent 4,009,785) as applied to claim 10 above, and further in view of Siniaguine et al. (6,099,056).

Siniaguine '056 does not overcome the above deficiencies in Siniaguine '843 and Trayes.

Claim 59 is rejected under 35 U.S.C. §103(a) as being unpatentable over Siniaguine et al. (U.S. Patent 6,099,056).

Independent claim 59 recites the plurality of fluid swirl formation objects extending from respective surfaces of the first and second arm parts such that respective end faces are at different levels from the respective surfaces of the first and second arm parts. It is respectfully submitted that the cited references do not teach or suggest these features.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By: _____

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